IN THE CLAIMS

This listing of the claims replaces all prior versions of the claims in the application.

Claims 1-10 (Canceled)

11. (**Currently Amended**) An isolated [human] antibody that specifically binds to a polypeptide selected from the group consisting of:

a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1, and

b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1 and having phosphatidylinositol 4,5-bisphosphate 5-phosphatase activity.

Claims 12-29 (Canceled)

30. (Withdrawn) A diagnostic test for a condition or disease associated with the expression of PBPP in a biological sample comprising the steps of:

a) combining the biological sample with an antibody of claim 11, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex; and

b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

31. (Original) The antibody of claim 11, wherein the antibody is:

a) a chimeric antibody,

b) a single chain antibody,

c) a Fab fragment,

d) a $F(ab')_2$ fragment, or

e) a humanized antibody.

32. (Original) A composition comprising an antibody of claim 11 and an acceptable excipient.

33. (Withdrawn) A method of diagnosing a condition or disease associated with the expression of PBPP in a subject, comprising administering to said subject an effective amount of the composition of claim 32.

34. (Previously presented) A composition of claim 32, further comprising a label.

35. (Withdrawn) A method of diagnosing a condition or disease associated with the expression of PBPP in a subject, comprising administering to said subject an effective amount of the composition of claim 34.

36. (**Currently amended**) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 11, the method comprising:

a) immunizing an animal with a polypeptide having ~~an~~ the amino acid sequence of SEQ ID NO:1 under conditions to elicit an antibody response; and

b) screening for a polyclonal antibody which binds specifically to a polypeptide having ~~an~~ the amino acid sequence of SEQ ID NO:1.

37. (Previously presented) A polyclonal antibody produced by a method of claim 36.

38. (Previously presented) A composition comprising the polyclonal antibody of claim 37 and a suitable carrier.

39. (**Currently amended**) A method of making a monoclonal antibody with the specificity of the antibody of claim 11, the method comprising:

a) immunizing an animal with a polypeptide having ~~an~~ the amino acid sequence of SEQ ID NO:1 under conditions to elicit an antibody response; and

b) screening for a monoclonal antibody which binds specifically to a polypeptide having ~~an~~ the amino acid sequence of SEQ ID NO:1.

40. (Original) A monoclonal antibody produced by a method of claim 39.

41. (Previously presented) A composition comprising the monoclonal antibody of claim 40 and a suitable carrier.

42. (Original) The antibody of claim 11, wherein the antibody is produced by screening a Fab expression library.

43. (Original) The antibody of claim 11, wherein the antibody is produced by screening a recombinant immunoglobulin library.

44. (Withdrawn) A method for detecting a polypeptide having an amino acid sequence of SEQ ID NO:1 in a sample, the method comprising:

a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and

b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having an amino acid sequence of SEQ ID NO:1 in the sample.

45. (Withdrawn) A method of purifying a polypeptide having an amino acid sequence of SEQ ID NO:1 from a sample, the method comprising:

a) incubating the antibody of claim 11 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and

b) separating the antibody from the sample and obtaining the purified polypeptide having an amino acid sequence of SEQ ID NO:1.

Claims 46-47 (Canceled)